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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,662	02/20/2004	George Lin	26008	5540
20529 7590 04/15/2008				
NATH & ASSOCIATES				
112 South West Street				
Alexandria, VA 22314				
EXAMINER				
NGUYEN, DUNG T				
ART UNIT		PAPER NUMBER		
2871				
MAIL DATE		DELIVERY MODE		
04/15/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/781,662

Applicant(s)

LIN, GEORGE

Examiner

Dung Nguyen

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 10-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

1. Applicant's response dated 01/07/2008 has been received and entered. Claims 1-9 are remain pending in the application. Claims 10-19 stand withdrawn from consideration.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-9 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kubo et al., US Patent No. 6,295,109, in view of Kaneda et al., US Patent No. 6,798,473 and Kubota et al., US 6,771,334A1, as stated in the previous office action.

Regarding claims 1 and 4-9, Kubo et al. disclose a transreflective liquid crystal display (LCD) device (figures 2 and 23E) comprising:

. a transparent substrate (1) having a common electrode (4) and an alignment layer inherently formed over the common electrode;

. a TFT array substrate (2/51) having a passivation layer (60), a reflection layer (61), a transparent conductive layer (58a) wherein a reflection portion is thicker than a transmissive portion (see figure 23E).

Kubo et al. neither disclose a color filter being formed over the TFT array substrate nor the ratio of two thicknesses of the reflective portion and the transmissive portion determined depending on the primary colors. Kaneda et al. do disclose a color filter (4a/4b/4c) can be formed over an TFT array substrate (figure 1) such as the reflection portion and the transmissive portion would have the same color density (e.g., same color).

Regarding claims 2 and 3, Kaneda et al. disclose the transparent conductive layer (5b) can be formed between the color filter (4a/4b/4c) and the liquid crystal layer (7).

Therefore, it would have been obvious to one skilled in the art at the time of the invention was made to employ a color over the Kubo et al. device, so as the transparent conductive layer would layout between the color filter and the TFT array substrate as shown by Kaneda et al. in order to obtain a good color display (e.g. color tone) in an LCD device (col. 9, ln 16-20).

In addition, Kubota et al. also disclose a relationship of cell thicknesses of the reflection portion and the transmissive portion that calculated through a hue simulation of the primary colors (see col. 4, lines 60-65). Therefore, it would have been obvious to one skilled in the art at the time of the invention was made to employ the cell thickness of Kubo et al. reflective/transmissive region(s) by calculated through the hue of the primary colors in order to improve a color reproducibility (see col. 4, in 65).

Response to Arguments

4. Applicant's arguments filed 01/07/2008 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the thicknesses of the reflection portions of the passivation layer under the red, green and blue color filters are different and the thicknesses of the transmissive portions of the passivation layer under the red, green and blue color filters are different corresponding to the thickness of the reflection portions) are not recited in the rejected claim(s). Although the claims are interpreted in light of

the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

It should be noted that Kubo et al. do disclose two thicknesses of the reflective portion and the transmissive portion (figure 23E), Kaneda et al. do disclose a planar color filter forming over the reflective/transmissive portion(s) with different thicknesses for the reflective portion and the transmissive portion and (figure 7E) and Kubota et al. disclose such color filter thicknesses for the reflective/transmissive portion(s) being different from each other for achieving hue variations for the transfective display (i.e., color filter thicknesses depends from a hue simulation of three primary color – red, green and blue colors)(see col. 4, lines 60-63). Therefore, one of ordinary skill in the art would be able to merely find how to combine and modify the Kubo et al. device in view of Kaneda et al. and Kubota et al. to result the claimed invention as well.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Nguyen whose telephone number is 571-272-2297. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 571-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DN
04/14/2008

/Dung T. Nguyen/
Dung Nguyen
Primary Examiner
Art Unit 2871